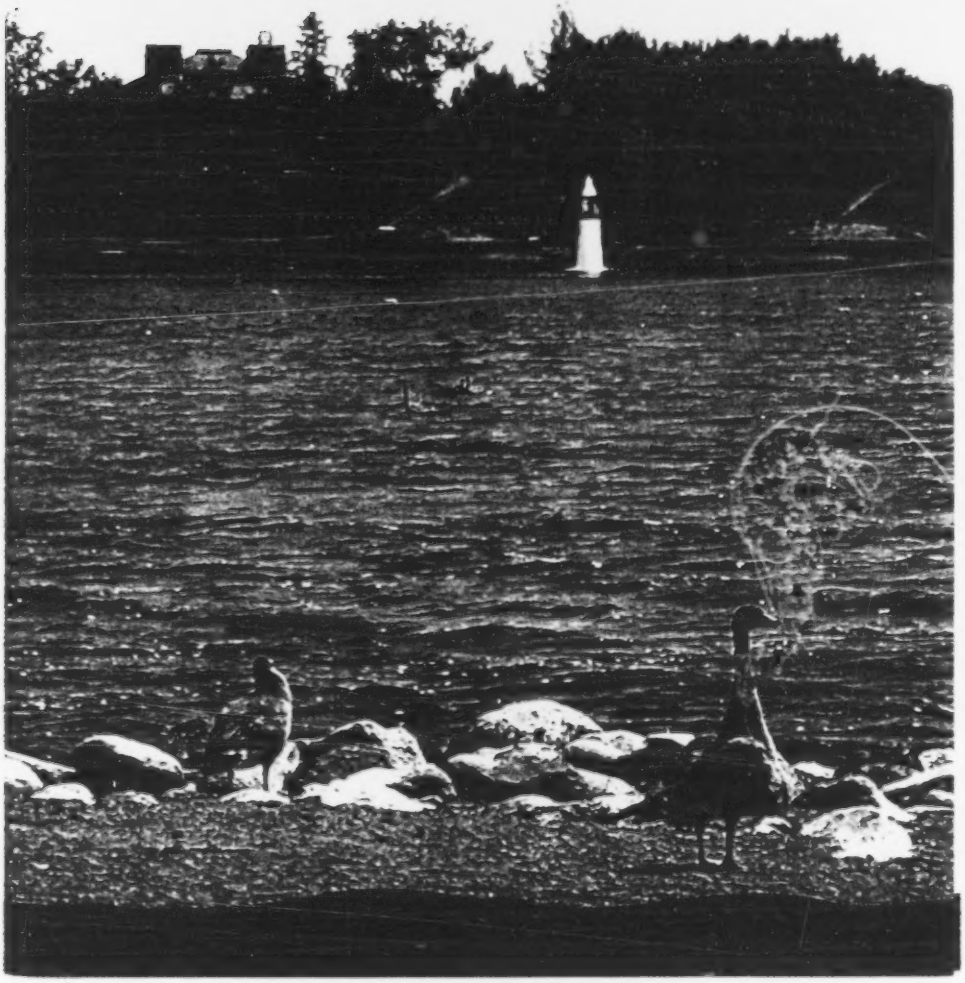
Wascana Lake

Urban Revitalization Project



100 Years of Wascana Lake

Wascana Lake is valued as a historic, scenic and recreational body of water located in the heart of Saskatchewan's capital city of Regina. It is considered the crown jewel of the Queen City.

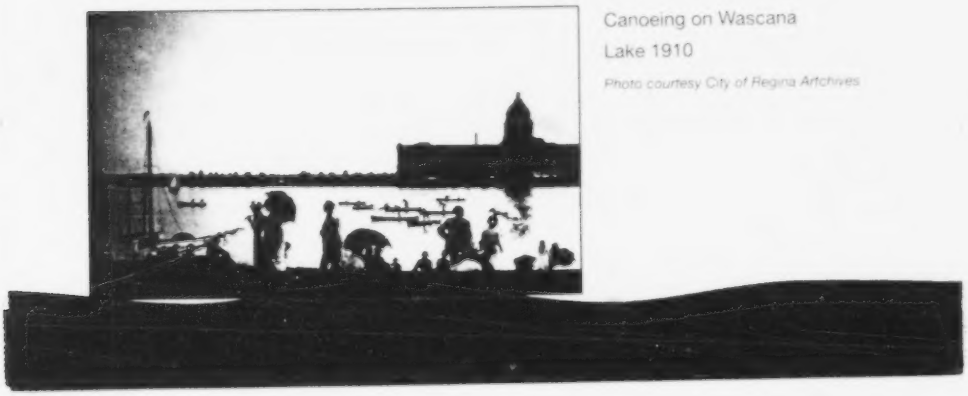
This man-made reservoir, fed by Wascana Creek, was first constructed in 1897 and used for domestic and livestock watering. In 1908, the city applied to the province to have the reservoir deepened to create an artificial lake for recreational purposes and to irrigate the new legislative grounds.

In the economic slump of the dirty '30s, the lake was deepened again in 1931, putting many unemployed men to work. These labourers enlarged the lake and used the excavated soil to create Willow and Spruce Islands.

In the years to come, Wascana Lake would become a focal point for recreational, educational, cultural and government activities and facilities. It also developed into a significant habitat for waterfowl and wildlife.

In 1956, the eastern portion of the lake was declared a Federal Migratory Bird Sanctuary, where over 200 breeding pairs of Canada Geese nest every year, and where more than 115 species of birds stopover during migration.

Wascana Centre Authority was formed in 1962 incorporating city, provincial and university lands under its management. In total, the Authority manages one of the largest urban parks in North America and its main geographical feature, Wascana Lake.



Canoeing on Wascana Lake 1910

Photo courtesy City of Regina Archives

The Threat of an Urban Marsh

In recent years, Wascana Lake has been losing depth. Gradually, but relentlessly, sediment has been collecting at the bottom of the lake reducing its depth by 35 per cent. On average, the lake depth measures 1.5 metres.

Through the shallow waters, sunlight has penetrated to the bottom of the lake, stimulating weed growth. The prolific growth of aquatic vegetation throughout the lake has affected the quality of the water and the capacity of the lake to support recreational activities such as rowing, canoeing and sailing.

The sedimentation and ongoing weed growth are threatening to turn Wascana Lake into an urban marsh. To let this process continue, would result in the deterioration of the lake and the habitat it provides, and all that it contributes to the history, the environment, and the people of Regina and Saskatchewan.

The Project Partners

On October 3, 2003, the three levels of government approved an $18 million project to deepen Wascana Lake. The Government of Canada has committed $9 million to the project, the province has committed $5 million and the City of Regina has committed $4 million. Wascana Centre is the beneficiary of the project.

SPMC hired the engineering firm of Clifton & Associates to conduct the required federal and provincial environmental assessments of the lake prior to construction. Public consultations and approvals by environmental authorities were part of that process.

The Revitalization Plan

The Wascana Lake Urban Revitalization Project proposes to deepen the west lake between Albert Street and Broad Street in Regina to a depth of 5.5 metres. This amount of deepening will improve the quality of the water, greatly reduce the growth of weeds, and return the lake to its former ecosystem for another 100 years.

The project is enormous in scope, involving the draining of the lake downstream into Wascana Creek — which took place in mid-October 2003 — the excavation of 1.2 million cubic metres of sediment and soil from the lakebed, and the transportation and deposit of that material to a number of designated sites.

The frozen lakebed will become the roadway for large excavating equipment and trucks to haul the soil to the deposit sites. Construction begins in December 2003 and will operate 24 hours a day, seven days a week until completion in late March 2004.

Assessing the Environment

A construction project of this size in an urban setting has taken careful engineering and environmental planning. Many federal and provincial approvals were required regarding soil content, water quality, habitat preservation, and deposit locations before the project could proceed.

Habitat – To protect aquatic habitat, a 10-metre zone extending from the shoreline into the lake will remain undisturbed, with the exception of the places where equipment will access the work site.

Fish – Over 9,000 minnows were live-captured and released downstream before the lake was drained. This live-capture process showed no evidence that there were any larger fish in the lake. However, the project will enhance fish habitat resulting in a more diverse species once the project is complete.

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Sedimentation – The water release rate was controlled to minimize the generation of sediment downstream from the lake. Draining was completed in mid-October and sedimentation was not evident. All excavated soils which might create sediment will be stabilized with vegetative plantings.

Sediment content – Prior to excavation, sediment in Wascana Lake was sampled and analyzed for a large number of chemical compounds. Most of the analyses showed the sediment met Canadian Sediment Quality Guidelines for being deposited on new land sites. A small area contains elevated hydrocarbons from engine oil, so this area will be further examined. If necessary, the soil will be disposed of in a licensed facility.

Equipment impact – Special care will be taken to ensure equipment used for the project is free of excess oil, grease and fuel residue. Equipment will not be serviced or stored on the lakebed, and water used to clean equipment will be diverted away from the lake.

Wildlife overwintering – The reservoir on Goose Island has been dammed to retain water so that area wildlife and birds still have some habitat area. Leopard frogs were looked for, but not found. It is believed the turtles that live in the Wascana habitat went into hibernation in mid-September. Beavers and muskrats will make their way to the reservoir as water sources disappear.

Environmental management plan – An extensive plan sets out all the environmental protection components of the project for the contractor who needs to comply with the terms and conditions of the plan, addressing issues such as spill prevention, environmental awareness training, environmental emergency response procedures and environmental monitoring, reporting and corrective action. Monthly reports will be submitted to the federal and provincial regulatory agencies during construction.

The Blueprint to a Better Lake

The design to deepen Wascana Lake was developed not only to address the problems of sedimentation and weed growth in the lake, but to benefit the people who visit and enjoy Wascana Centre.

Excavated sediment and soil will be deposited in two main locations: Wascana Hill, where it will increase the size and height of the hill and add rolling contours to its shape, enhancing tobogganing and recreational activities, as well as providing a habitat for upland wildlife; and on agricultural land east of the TransCanada Highway near the SIAST building. Some soil will be deposited to expand the shorelines of Willow and Goose Islands.

The lakebed material will also be used to create improvements in and around the lake. A promenade will be constructed at the west end of the lake next to the Albert Street Bridge, providing a continuous path around the lake. A pedestrian pathway will be developed along the north shoreline linking the Science Centre to Wascana Hill Lookout.

As well, a new boat channel will be created, turning the historic Broad Street Bridge abutment into an island that will be connected to the mainland by a pedestrian bridge. The current pathway system on the south shore will be extended east of the new island including a new low level crossing under the Broad Street Bridge linking the East Lake and West Lake recreational areas.

Revitalization Benefits

- ✓ Improved water quality and quantity
- ✓ Reduced aquatic vegetation
- ✓ New aeration system supports fish habitat, reduces odour at spring thaw
- ✓ Improved recreational amenities: promenade deck; pedestrian pathways; new island; pedestrian bridge; waterfall; fountain
- ✓ Higher, larger, reshaped Wascana Hill
- ✓ Improved recreational venue — 2005 Jeux du Canada Games

Wascana Lake will become a major construction site for four months from December to March. Work will be continuous 24 hours a day, seven days a week, characterized by ongoing noise from the equipment, and strict safety regulations to protect the public.

Construction noise – Winter is the best season for this construction to occur with respect to noise levels. Most people are indoors where outdoor noise is not as noticeable. The engineering firm of Clifton & Associates has researched the expected noise levels from the equipment and reports the highest noise level will be comparable to the sounds of rush hour traffic on the Albert Street Bridge. Construction noise will be most noticeable at night because there are no other background sounds such as traffic to muffle the noise. Construction noise can be irritating and requires patience and understanding from the community.

Construction safety – Dominion Construction will manage the safety on site. Public access onto the lakebed is prohibited, as this is a dangerous site with large, moving equipment. Several safe vantage points are located throughout the park for people who want to observe the lake and construction activities, including Trafalgar Lookout and lookouts at Willow and Spruce Islands and Candy Cane Park.

History in the Making

Since the Wascana Lake Urban Revitalization Project was announced, the public has taken a great interest in the project. The 2003/04 deepening is a special event in the history of Regina, and a unique feat of engineering.

Two webcams, one located at the Legislative Building, and the other at the First Nations University of Canada, are recording historic snapshots of the lake project which can be viewed on the project web site at **www.wascanalake.com.**

Wascana Place in Wascana Park is showcasing information on the lake in their lobby for the duration of the project and is offering speakers who can make project presentations at schools, service clubs, or at other organizations interested in learning more about this historic event.

For more information on the project, please contact Wascana Centre Authority at 2900 Wascana Drive, (306) 522-3661.

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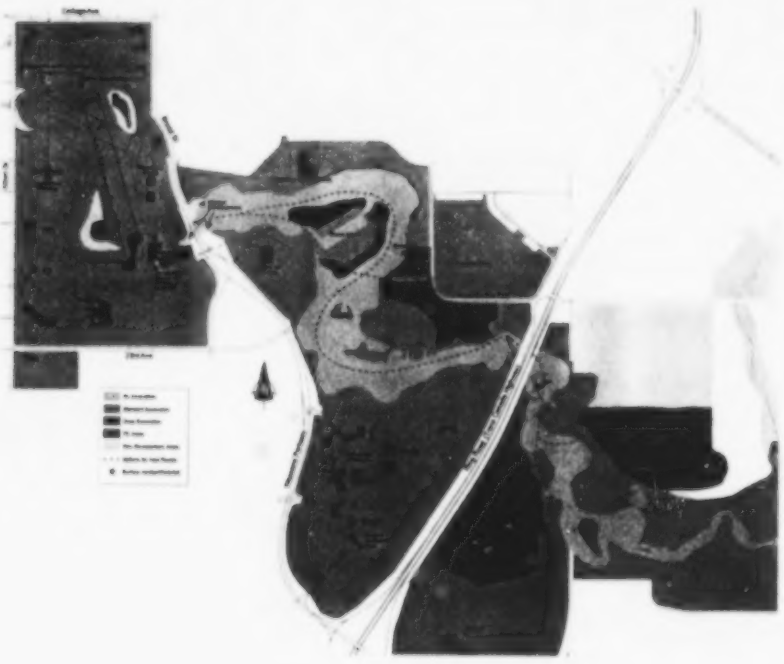

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